

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A system for dispensing a filament of liquid assisted by pressurized process air, and convertible between two filament dispensing patterns, the system comprising:

(a) a housing having

(i) a liquid supply passage in fluid communication with said liquid outlet of said dispensing valve,

(ii) a process air supply passage, and

(iii) a recess having a nozzle mounting surface, said liquid supply passage and said process air supply passage opening on said nozzle mounting surface;

(b) a first nozzle having an inlet side and an outlet side, said inlet side positioned within said recess and adjacent said mounting surface and said outlet side having at least one liquid discharge orifice and a plurality of process air discharge passages arranged in a first configuration adjacent said liquid discharge orifice, said liquid discharge orifice and said process air discharge passages respectively being in fluid communication with said liquid supply passage and said process air supply passage of said housing; and

(d) a second nozzle configured to be substituted for said first nozzle and having an inlet side and an outlet side, said inlet side of said second nozzle positionable within said recess and adjacent said mounting surface and capable of being mounted in sealing engagement with said mounting surface, said outlet side having at least one liquid discharge orifice and a plurality of process air discharge passages arranged in a second configuration differing from said first configuration and positioned adjacent said liquid discharge orifice of said second nozzle, said liquid discharge passage and said process air discharge passages of said second nozzle respectively being in fluid communication with said liquid supply passage and said process air supply passage when said second nozzle is substituted for said first nozzle and mounted within said recess against said mounting surface.

2. (Original) The apparatus of claim 1, wherein said first and second nozzles are each selected from a group consisting of a nozzle having liquid discharge orifices and process air discharge passages configured to produce meltblown filaments and a nozzle having a liquid discharge orifice and process air discharge passages configured to produce a swirled filament.

3. (Original) A nozzle adapted to be coupled to a dispenser having a mounting recess with a first cam surface and a clamping member with a second cam surface, said nozzle configured to dispense a filament of liquid assisted by pressurized process air and comprising:

a nozzle body having a top side, a bottom side and a plurality of side walls, said top side including a liquid inlet and a process air inlet, and said bottom side including a liquid discharge orifice in fluid communication with said liquid inlet and a plurality process air discharge passages in fluid communication with said process air inlet, and

first and second opposite side walls extending between said top and bottom sides, said first and second opposite side walls each including a cam surface adapted to respectively mate with the first and second cam surfaces of said dispenser.

4. (Original) The nozzle of claim 3, further comprising a plurality of liquid discharge orifices in said nozzle body, said liquid discharge orifices and said process air discharge passages configured to produce meltblown filaments.

5. (Original) The nozzle of claim 3, further comprising a plurality of liquid discharge orifices in said nozzle body, said liquid discharge orifices and said process air discharge passages configured to produce a swirled filament from each of said liquid discharge orifices.

6. (Original) The nozzle of claim 3, wherein said liquid discharge orifice and process air discharge passages are configured to produce a swirled filament.

7. (Original) The nozzle of claim 3, further comprising:

an air trough on said top side, said air trough configured to be in fluid communication with said process air inlet and said process air discharge passages of said nozzle, said trough forming a tortuous path for the process air flowing between said top side of said nozzle and said process air discharge passages to reduce the velocity of the process air discharging from said process air discharge passages relative to the velocity of the process air entering said trough.

8. (New) A method of attaching a nozzle having a liquid dispensing passage to a dispensing valve having a housing with a nozzle mounting surface, a liquid supply passage opening to the nozzle mounting surface, and a clamping and ejecting lever coupled to the housing, the method comprising:

positioning the nozzle adjacent to the nozzle mounting surface,
pivoting the nozzle clamping and ejecting lever to a first position to clamp the nozzle to the nozzle mounting surface so that the liquid supply passage communicates with the liquid dispensing passage, and
pivoting the nozzle clamping and ejecting lever to a second position to move the nozzle away from the nozzle mounting surface.

9. (New) The apparatus of claim 8, wherein the nozzle further includes an air discharge passage and the housing further comprises an air supply passage opening to said nozzle mounting surface, and pivoting the nozzle clamping and ejecting lever to the first position further comprises:

clamping the nozzle to the nozzle mounting surface so that the air supply passage communicates with the air discharge passage.

10. (New) The method of claim 8, wherein the nozzle further includes a side wall having a projecting tab and the housing further includes a slot, and positioning the nozzle adjacent to the nozzle mounting surface further comprises registering the tab in the slot to align the nozzle on the nozzle mounting surface.

11. (New) The method of claim 8, wherein the nozzle further includes a side wall having a projecting tab and the nozzle clamping and ejecting lever further includes a slot, and positioning the nozzle adjacent to the nozzle mounting surface further comprises registering the tab in the slot to align the nozzle on the nozzle mounting surface.

12. (New) The method of claim 11, further comprising:

engaging the projecting tab with the nozzle clamping and ejecting lever while pivoting the nozzle clamping and ejecting lever to the second position.

13. (New) The method of claim 8, wherein the nozzle clamping and ejecting lever further includes a tightening and locking fastener, and pivoting the nozzle clamping and ejecting lever to the first position further comprises:

moving the nozzle clamping and ejecting lever with the tightening and locking fastener.

14. (New) The method of claim 13, wherein moving the nozzle clamping and ejecting lever with the tightening and locking fastener further comprises:

rotating the tightening and locking fastener.

15. (New) A valve for dispensing a filament of liquid assisted by pressurized process air, comprising:

a valve housing having an interior containing a liquid discharge passage and a reciprocating valve member movable between open and closed positions to selectively allow and prevent flow of the liquid through said liquid discharge passage,

an actuator housing including a spring return mechanism coupled to said valve member to urge said valve member toward said closed position, a chamber including a diaphragm coupled to said valve member and dividing said chamber into first and second portions, a first air supply port communicating with said first portion to allow input of pressurized air to urge said diaphragm and said valve member toward said closed position, a second air supply port communicating

with said second portion to allow input of pressurized air to urge said diaphragm and said valve member toward said open position, an exhaust port communicating with said first portion, and a plug for selectively opening and closing said exhaust port to allow air introduced into said first air supply port to be exhausted from said first portion.